DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-003634 Address: 333 Burma Road **Date Inspected:** 06-Aug-2008

City: Oakland, CA 94607

OSM Arrival Time: 2230 Project Name: SAS Superstructure **OSM Departure Time:** 730 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: See below **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No **Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component: OBG** Fabrication

Summary of Items Observed:

Caltrans Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. The QA Inspector observed the following:

Orthotropic Box Girder (OBG) and Tower Fabrication:

QC Inspector Mr. Liu Hua Jie

Bay 7

QA completed ultrasonic inspection of floor beam weld FB003-055-036. The QA Inspector observed ZPMC inspection personnel had indicated that welds FB003-055-010, FB003-055-022 and FB003-055-046 as being ultrasonic rejects. ZPMC had previously accepted ultrasonic inspections of weld FB003-055-036. Items observed by the QA Inspector appear to comply with project specifications. See the TL6027 ultrasonic test report for additional information.

QA completed ultrasonic inspection of floor beam welds FB023-001-127, FB023-001-146, FB024-001-125, FB024-001-126 and FB024-001-146. ZPMC had previously accepted ultrasonic inspections of all the welds listed above. The QA Inspector observed ZPMC inspection personnel had indicated that weld FB024-001-127 has been marked as being an ultrasonic reject. Items observed by the QA Inspector appear to comply with project

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specifications. See the TL6027 ultrasonic test report for additional information.

Bay 8

The QA Inspector observed ZPMC welder Mr. Xie Chun Fu welder number 045236 is using welding procedure specification WPS-B-T-2333-B-U3-F to weld the complete joint penetration groove weld ESD1-SA301A/B-5. The QA Inspector observed a welding current of approximately 210 amps, 26.0 volts and the base material temperature appears to be within the required limits of the WPS. Items observed by the QA Inspector appear to comply with project specifications.

The QA Inspector observed ZPMC welder Mr. Chen Chaonian welder number 048688 is using welding procedure specification WPS-B-T-2333-B-U3-F to weld the complete joint penetration groove weld ESD1-SA301A/B-7. The QA Inspector observed a welding current of approximately 210 amps, 26.2 volts and the base material temperature appears to be within the required limits of the WPS. Items observed by the QA Inspector appear to comply with project specifications.

The QA Inspector observed ZPMC welder Mr. Wei Hengbin welder number 048924 is using welding procedure specification WPS-B-T-3312 to weld partial penetration groove weld ESD1-SA371B/B-3. The QA Inspector observed a welding current of approximately 185 amps and the base material temperature appears to be within the required limits of the WPS. Items observed by the QA Inspector appear to comply with project specifications.

The QA Inspector observed ZPMC welder Mr. Bao Shan Wen welder number 045183 is using welding procedure specification WPS-B-T-3312 to weld partial penetration groove weld ESD1-SA371B/B-3. The QA Inspector observed a welding current of approximately 175 amps and the base material temperature appears to be within the required limits of the WPS. Items observed by the QA Inspector appear to comply with project specifications.



Summary of Conversations:

See above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Ady Velasco 13816942685, who represents the Office of Structural Materials for your project.

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Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer